

---

**From:** Lovenburg, John/SCO  
**Sent:** Wednesday, June 01, 2005 1:40 PM  
**To:** Collar, Robert/SCO  
**Subject:** RE: 1,2,3-Trichloropropane

Bob - I don't have Chris Johnson's work number. He is located at Shaw's Irvine office. Here is the information for one of Chris' co-workers.

James P. Werkmeister, P.E. 3347 Michelson Drive, Suite 200 Irvine, CA 92612	jim.werkmeister@shawgrp.com Telephone: 949-660-5467 Fax: 949-474-8309
---	---

---

**From:** Collar, Robert/SCO  
**Sent:** June 01, 2005 11:44 AM  
**To:** Lovenburg, John/SCO  
**Cc:** Dolegowski, John/SCO; Lowey, Rob/SCO  
**Subject:** RE: 1,2,3-Trichloropropane

Thanks, John. This is useful information. I may want to call Chris, simply to confirm that 1,2,3-TCP was used as a solvent in vehicle maintenance. If you don't mind adding another CH2M HILL face/voice to Chris' memory, either I or John (or what about David Poley) can call him. Alternatively, if you'll be talking to him in the next couple of days, that would work. Again, we just want to be able to document uses of 1,2,3-TCP around town to help us find similar users in the SGV.

Thanks,

Bob

---

**From:** Lovenburg, John/SCO  
**Sent:** Wednesday, June 01, 2005 8:54 AM  
**To:** Collar, Robert/SCO; Coffey, John/WDC  
**Cc:** Dolegowski, John/SCO; Simpkin, Tom/DEN; Lowey, Rob/SCO  
**Subject:** RE: 1,2,3-Trichloropropane

Bob -

The Tustin site is a shallow (about 15 feet to water table) plume with high levels of 1,2,3-TCP and low levels of TCE (not sure about daughter products). The 1,2,3-TCP release was from a vehicle maintenance building; I believe it was used as a solvent. The 1,2,3-TCP plume is commingled with a gas station release MtBE plume. The treatment system, operated by Shaw, has an ex-situ treatment system for the commingled plume. Chris Johnson/Shaw reports on the system at each of the community Restoration Advisory Board meetings. Rob Lowey has attended each of the last several meetings and can provide you with a copy of the notes that describe the elements of the ex-situ treatment system if that would help.

If you wanted more information on 1,2,3-TCP uses or treatment from Chris Johnson/Shaw, I can provide you his phone number. Rob and I are working with Chris now on the Lennar El Toro project.

John

**From:** Collar, Robert/SCO  
**Sent:** June 01, 2005 6:16 AM  
**To:** Coffey, John/WDC  
**Cc:** Lovenburg, John/SCO; Dolegowski, John/SCO; Simpkin, Tom/DEN  
**Subject:** RE: 1,2,3-Trichloropropane

Hi John C.,

Our draft project-specific guidance document on 1,2,3-TCP is currently undergoing senior review by Jim Hartley/SAC and we plan to provide it to our EPA client this Friday or next Monday. It's pretty comprehensive and only slightly geared to our site where depth to groundwater is about 300 feet bgs and where we're trying to identify the source of regional 1,2,3-TCP groundwater contamination. Please let me know what your needs are and I'll see if I can provide you with a copy (I just need to look into the nuances associated with producing a document for one client and then turning around and using it internally on other projects).

John L., if you have any information on what MCAS Tustin used 1,2,3-TCP for, it would help us identify types of uses that might have occurred in the San Gabriel Valley.

I hope this helps (John C.).

Bob

---

**From:** Coffey, John/WDC  
**Sent:** Wednesday, June 01, 2005 6:03 AM  
**To:** Collar, Robert/SCO  
**Subject:** FW: 1,2,3-Trichloropropane

Rob,

This is a topic that came up in a recent technology call. Have you folks completed this effort or is it still in play?

John

---

**John J. Coffey II, Ph.D.**

**CH2MHILL, Inc.**  
13921 PARK CENTER ROAD, SUITE 600  
HERNDON, VA 20171-3241  
703.471.6405 ext 4211 voice  
571.274.6105 mobile  
703.796.6227 direct fax  
[jcoffey@ch2m.com](mailto:jcoffey@ch2m.com)

---

**From:** Lovenburg, John/SCO  
**Sent:** Tuesday, May 31, 2005 7:10 PM  
**To:** Simpkin, Tom/DEN; Coffey, John/WDC  
**Subject:** RE: 1,2,3-Trichloropropane

Besides the EPA Region IX projects, 1,2,3-TCP is also a COC on the Lennar Tustin project. I can provide more detail, if needed.

---

**From:** Simpkin, Tom/DEN  
**Sent:** May 31, 2005 3:42 PM  
**To:** Coffey, John/WDC

**Cc:** Lovenburg, John/SCO  
**Subject:** FW: 1,2,3-Trichloropropane

now I know why I don't delete emails. Some times you find useful ones. Rob is the person that might have a white paper on TCP started.

---

**From:** Collar, Robert/SCO  
**Sent:** Thursday, March 24, 2005 8:24 AM  
**To:** Simpkin, Tom/DEN; Hartley, Jim/SAC; D'Aurora, Vito/RDD  
**Cc:** Drinkard, Sally/SCO  
**Subject:** RE: 1,2,3-Trichloropropane

Hi Guys,

Thanks for your replies to my inquiry. After talking with the client, we've now been asked to do a little more on this subject: to take our fact sheet information and expand it to include some site investigation procedures, strategies, etc. that a state agency here in California can potentially use in asking site owners to investigate their property. I alerted the client that this will require substantially more time and that I'll need to come up with a scope, schedule, and budget.

At this point it seems like Vito has some time and certainly the expertise to help with summarizing analytical methods and properties. And, Jim can provide senior input/review. I am looking to identify staff here in SCO to lead this, as I am unable to offer the necessary time given my PM responsibilities. I might be able to utilize Dan, though I don't want to have too many people involved in this relatively short effort, so I am leaning against this. I manage another EPA project here where we might be able to use Dan and we're in the process of trying to carve out some work for him.

I will get back to Vito and Jim within the next few/several days regarding moving forward with this task, which will likely be active over the next few weeks, to be completed say in mid-April.

Thanks again,

Bob

---

**From:** Simpkin, Tom/DEN  
**Sent:** Wednesday, March 23, 2005 1:46 PM  
**To:** Collar, Robert/SCO; Hartley, Jim/SAC; D'Aurora, Vito/RDD  
**Subject:** RE: 1,2,3-Trichloropropane

I am not aware of such a fact sheet. Jason Cole prepared one for 1,4 dioxane, but we don't have anything for TCP, so this would be good. Dan Cichy is a relatively new hydro we have here in DEN who has some availability and is good doing research (if you give him enough guidance). He is not a chemist, but can do some digging for you.

-----Original Message-----

**From:** Collar, Robert/SCO  
**Sent:** Tuesday, March 22, 2005 5:51 PM  
**To:** Simpkin, Tom/DEN; Hartley, Jim/SAC; D'Aurora, Vito/RDD  
**Subject:** 1,2,3-Trichloropropane

Guys,

I can use some help (maybe 8-16 hours) tracking down information on this chlorinated VOC. We have a 5 parts per trillion regulatory level here in California for this VOC in drinking water and the state has developed an analytical method with a 5 ppt detection limit for water. However, EPA Region IX (our client) has been developing a "fact sheet" or "white paper" for this VOC for use on our project. We want to know about properties, analytical methods, and case histories of where this VOC has been detected in groundwater, soil, and soil gas. The fact sheet/white paper is 85% done, but is missing analytical information for soil and soil gas (i.e., methods and detection limits) and case history information (I know of two sites in the U.S.). Essentially what we want when we're done is a fact sheet/white paper that we can use to guide investigations designed to find and

evaluate sources of this contaminant at a large Superfund site in southern California. And, EPA has asked us to take over from another contractor and finish the fact sheet/white paper.

We have the groundwater contamination delineated reasonably well, but need to come up with information to help guide investigations aimed at finding and characterizing the source of the groundwater contamination.

My questions are as follows:

1. So that we don't reinvent the wheel, does such a fact sheet/white paper exist in the public domain?
2. If not, could you recommend someone in the firm who could help me research some of this information with my guidance?

Any guidance you can provide so that I can finish the fact sheet/white paper within the next 1-2 of weeks would be appreciated.

Thanks,

**Bob**

Robert J. Collar  
CH2M HILL  
3 Hutton Centre Drive, Suite 200  
Santa Ana, CA 92707  
714-435-6274 (direct phone)  
714-424-2078 (direct fax)  
[rcollar@ch2m.com](mailto:rcollar@ch2m.com) (e-mail)